# IN THE IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Attorney Docket № 24635US01)

In the Application of:		Confirmation No. 3854
Daniel Ledermann	et al.	Customer No. 23446
Serial No. 10/791,831	)	CERTIFICATE OF TRANSMISSION
Filed: March 4, 2004	) )	I hereby certify that this correspondence is being transmitted via EFS-Web to the
For: SYSTEM FOR RECOR PLAYBACK OF TELEV FROM A PLURALITY OF	ISION SIGNALS	United States Patent and Trademark Office on: <u>March 21, 2012</u> .
CHANNELS	)	/Christopher C. Winslade/ Christopher C. Winslade
Examiner: Thomas, Jason M.		Reg. No. 36,308
Group Art Unit: 2423	)	

### **APPEAL BRIEF**

Mail Stop Appeal Brief – Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

This paper responds to the final office action mailed October 28, 2011 (hereinafter "Final Office Action") in the above-identified application, in which claims 1-3 and 7-14 were finally rejected. The Applicant respectfully requests that the Board of Patent Appeals and Interferences (hereinafter "Board") reverse the final rejection of claims 1-3 and 7-14 of the present application (hereinafter "Application.") The Applicant notes that this appeal brief (hereinafter "Appeal Brief") is timely filed within the period for reply that ends on August 21, 2012.

## REAL PARTY IN INTEREST (37 C.F.R. § 41.37(c)(1)(i))

Swisscom AG, a corporation organized under the laws of Switzerland, and having a place of business at Alte Tiefenaustrasse 6, CH-3050 Bern, Switzerland, has acquired the entire right, title and interest in and to the invention, the application, and any and all patents to be obtained therefor, as set forth in the Assignment recorded at Reel <u>019341</u>, Frame <u>0599</u> in the PTO Assignment Search room.

## RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 41.37(c)(1)(ii))

The Appellant is unaware of any related appeals or interferences.

## **STATUS OF THE CLAIMS** (37 C.F.R. § 41.37(c)(1)(iii))

Claims 1-3 and 7-14 are currently pending in the present application, all of which are the subject of this appeal. All of claims 1-3 and 7-14 were finally rejected. In this regard, claims 1, 2, 11 and 14 stand rejected under 35 U.S.C. § 103(a) for allegedly being unpatentable over Mizutani (U.S. Patent No. 7,003,791; hereinafter "Mizutani,") in view of Christopoulos et al. (U.S. Patent Application Publication No. 2001/0047517; hereinafter "Christopoulos,") Perlman (U.S. Patent Application Publication No. 2002/0184637; hereinafter "Perlman,") Solomon (U.S. Patent Application Publication No. 2003/0070174; hereinafter "Solomon,") and Paxton et al. (U.S. Patent No. 7,900,231; hereinafter "Paxton.") Claim 3 stands rejected under § 103(a) for allegedly being unpatentable over Mizutani, in view of Christopoulos, Perlman, Solomon, and Paxton, and further in view of Jones et al. (Canadian Patent No. 2,321,462; hereinafter "Jones.") Claims 7, 8 and 10 stand rejected under § 103(a) for allegedly being unpatentable over Mizutani, in view of Christopoulos, Perlman, Solomon, and Paxton, and further in view of Fingerman et al. (U.S. Patent Application Publication No.

7.143,430; hereinafter "Fingerman.") Claim 9 stands rejected under § 103(a) for allegedly being unpatentable over Mizutani, in view of Christopoulos, Perlman, Solomon, and Paxton, and further in view of Ellis et al. (U.S. Patent Application Publication No. 2003/0149988; hereinafter "Ellis.") Claim 12 stands rejected under § 103(a) for allegedly being unpatentable over Mizutani, in view of Christopoulos, Perlman, Solomon, and Paxton, and further in view of Slotznick (U.S. Patent Application Publication No. 7,058,356; hereinafter "Slotznick.") Claim 13 stands rejected under § 103(a) for allegedly being unpatentable over Mizutani, in view of Christopoulos, Perlman, Solomon, and Paxton, and further in view of Mensch (U.S. Patent Application Publication No. 2002/0133824; hereinafter "Mensch.")

The text of the pending claims is provided in the Claims Appendix. See infra.

## STATUS OF AMENDMENTS (37 C.F.R. § 41.37(c)(1)(iv))

The Applicant has not amended any claims subsequent to the final rejection of claims 1-3 and 7-14 in the Final Office Action.

## SUMMARY OF CLAIMED SUBJECT MATTER (37 C.F.R. § 41.37(c)(1)(v))

The invention of claim 1 is illustratively described in the specification of the Application, for example in various parts of the "MODES FOR CARRYING OUT THE INVENTION" section; and in FIG. 1. Certain embodiments of the invention of independent claim 1 may be based on a system for recording and playback of television signals from a plurality of television channels. *See*, *e.g.*, Application, at ¶¶ [0004]-[0015]. Specifically, the system may include storage unit. *See*, *e.g.*, Application, at ¶¶ [0048]-[0049]; and FIG. 1 (references 16 "data memory for recording instructions" and 17 "recording memory"). The system may also include a computer-based controlling central unit, connectible to a telecommunication network. *See*, *e.g.*, Application, at ¶¶

[0006], [0020], [0039] and [0043]; and FIG. 1 (references 3 "telecommunication network" and 10 "computer-based controlling central unit"). The system may also include a plurality of television receivers, each connected to the controlling central unit and configured to receive television signals on one of the television channels. See, e.g., Application, at ¶¶ [0006], [0018], [0020] and [0045]; and FIG. 1 (references 12, 13, ..., n "television receivers"). The system may also include plurality of coding modules, connected to the television receivers, configured to code the received television signals into a digital format. See, e.g., Application, at ¶¶ [0006], [0019] and [0056]; and FIG. 1 (references 121, 131, ..., n1 "coding module[s]"). The system may also include an instruction unit connected to the controlling central unit, configured to receive and store recording instructions from users via the telecommunication network, the recording instructions including a user identification of a mobile terminal, electronic programming guide (EPG) information identifying a program to be recorded of the television signals, and quality parameters, and configured to instruct the controlling central unit to select and store the television signals in the digital format on the storage unit corresponding to the program identified by the electronic programming guide information of the recording instructions and based on the quality parameters, and configured to assign the user identification to the selected television signals and to store the user identification together with the television signals on the storage unit. See, e.g., Application, at ¶¶ [0007], [0011]-[0012], [0023], [0034] and [0050]; and FIG. 1 (references 101 "instructions module"). The system may also include a playback module configured to generate access right keys based on digital rights management information, after the user sends the digital rights management information to the playback module that includes access rights for the program that was previously selected by the user and previously stored at the storage unit, and to transmit the television signals stored in the digital format on the storage unit in a format that depends upon the quality parameters and the access right keys via the telecommunication network for playback to a display terminal associated to the user, the display terminal being identified by a network address that is linked to the user identification assigned to the respective stored

television signals of the storage unit. See, e.g., Application, at  $\P$  [0006], [0010]-[0011], [0023], [0030], [0031], [0034] and [0044]; and FIG. 1 (reference 11 "playback module").

Claims 2, 3 and 7-14 depend, directly or indirectly, upon independent claim 1.

## GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL (37 C.F.R. § 41.37(c)(1)(vi))

Claims 1-3 and 7-14 stand rejected. In this regard, claim 1-3 and 7-14 stand finally rejected under 35 U.S.C. § 103(a) for allegedly being unpatentable over various combinations of Mizutani, Christopoulos, Perlman, Solomon, and Paxton, Jones, Fingerman, Ellis, Slotznick, and Mensch.

## ARGUMENT (37 C.F.R. § 41.37(c)(1)(vii))

#### A. CLAIM REJECTIONS

The Application includes claims 1-3 and 7-14, all of which have been rejected by the Examiner in the Final Office Action. The Applicant respectfully maintains that all these claims define patentable subject matter.

### CLAIM REJECTIONS UNDER 35 U.S.C. § 103

The Applicant turns to the claim rejections under 35 U.S.C. § 103(a) based on various combinations of Mizutani, Christopoulos, Perlman, Solomon, and Paxton, Jones, Fingerman, Ellis, Slotznick, and Mensch. Without conceding that any of Mizutani, Christopoulos, Perlman, Solomon, and Paxton, Jones, Fingerman, Ellis, Slotznick, and Mensch would qualify as prior art; or that any combination thereof is valid for purposes of 35 U.S.C. § 103(a), the Applicant respectfully traverses these rejections.

Initially, the Applicant notes that the determination of obviousness is a legal conclusion based on underlying findings fact. *Sanofi-Synthelabo v. Apotex, Inc.*, 550 F.3d 1075, 1085 (Fed. Cir. 2008). The factual inquiries include: (1) the scope and content of the prior art, (2) the differences between the prior art and the claims, (3) the level of ordinary skill in the relevant art, and (4) any objective indicia of non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 86 S.Ct. 684 (1966). Initially, the burden is on the Examiner to establish a *prima facie* case of obviousness. *See* MPEP at § 2142. "If the Examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness." *See id*.

"The determination of obviousness is made with respect to the subject matter as a whole, not separate pieces of the claim." *Apotex*, 550 F.3d 1075 at 1086. (citing *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007); *Kimberly-Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437, 1448 (Fed.Cir.1984)). Accordingly, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." *See* MPEP

§ 2143.03 (quoting *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970)). If, considering the claim as a whole, the Examiner deems the claim to be obvious in view of the prior art, the Examiner must provide a "clear articulation of the reason(s) why the claimed invention would have been obvious." *See* MPEP § 2142. The Examiner's determination of obviousness "cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR*, 550 U.S. 398 at 418 (quoting *In re Kahn*, 441 F.3d 977, 988, (Fed. Cir. 2006)).

In reviewing an Examiner's determination of obviousness, "the Board cannot simply reach conclusions based on its own understanding or experience—or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings." *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001). *See also In re Vaidyanathan*, Appeal 2009-1404 at 18-19 (Fed. Cir. May 19, 2010) (nonprecedential) ("If the examiner is able to render a claim obvious simply by saying it is so, neither the Board nor [the Federal Circuit] is capable of reviewing that determination. ... If there is neither record evidence nor detailed examiner reasoning, the Board should not conclude that [the Appellant's] claims are obvious.")

With those principles in mind, the Applicant now turns to the claim rejections.

### I. Rejection of Independent Claim 1

With regard to the rejection of independent claim 1 under U.S.C. § 103(a) for allegedly being unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton, the Applicant submits that the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton does not teach, disclose or suggest all of the limitations recited in the Applicant's claim 1.

a. The cited references do not teach or suggest "a playback module configured to generate access right keys based on digital rights management information, after the user sends the digital rights management information to the playback module"

With regard to the rejection of independent claim 1 under U.S.C. § 103(a), the Applicant submits that the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton does not teach or suggest at least a "playback module configured to generate access right keys based on digital rights management information, after the user sends the digital rights management information to the playback module ..." as recited by the Applicant's claim 1. The Applicant notes that the Examiner refers for alleged support with respect to this limitation to Paxton, at Figs. 3 and 6; Abstract; col. 2, lines 43-53; col. 5, lines 22-45; col. 13, lines 4-21; and cols. 20-21, lines 55-5 and 51-63 (further arguing that Paxton teaches a "playback system" that is configured to "generate access rights for the subscriber after the user sends DRM information (i.e. subscriber identification information, pin, access code, etc.) to the system for a program that was previously selected and stored by the user at an archive content server in a broadcast system.") *See* Final Office Action, at pp. 6-7.

Paxton, at col. 5, lines 22-45; col. 13, lines 4-21; and cols. 20-21, lines 55-5 and 51-63, states (in pertinent part):

Embodiments further allow subscribers (such as the subscriber 54a) to select particular programs for longer-term archival. For example, broadcast service provider 51 or a subscriber (such as subscriber 54a as shown in FIG. 1) may wish to create a longer-term copy of a particular broadcast of the "Evening News". Subscriber 54a may indicate this desire by communicating with -broadcast service provider 51 (e.g., via a set top box or other device as will be discussed further below). A copy of the broadcast may then be stored on a storage device 52 used for longer-term storage of programs. In some embodiments, the copy of the program is associated with information uniquely identifying the subscriber 54a so that the subscriber 54a may be allowed access to the program as desired ...

Timeslip server 3 also includes a playout module 49 to control playout of archived programs. Playout involves locating the start of a requested program and streaming the content off the appropriate storage device to the particular set top box 8 associated with the subscriber who requested the content. A request message submitted from a set top box 8 will include information identifying the particular subscriber making the request (as well as information to allow switching and routing devices 6 to set up a unicast session with the set top box). When a subscriber requests a program, the request is routed to timeslip server 3 through playout module 49 which causes schedule table 41 to be consulted to identify the start point of the requested program ...

[P]rograms may be tagged as ... "Restricted": there are two cases of Restricted access--any current program which is marked as "Restricted" in the availability database and any program broadcast during a watershed or other regulated period. In some embodiments, access to "Restricted" programs is controlled. For example, subscribers may be required to enter a PIN or possess an access code.

The Applicant respectfully disagrees with the Examiner's reliance on Paxton in this regard. Specifically, the Applicant submits that Paxton does not disclose or describe any "access right keys" that are associated playout module 49, which the Examiner equates with the Applicant's "playback module;" nor does Paxton teach the use of any such "access right keys" in conjunction with operations of the playout module 49. The Applicant initially notes that the information to which the Examiner refers (subscriber identification information, pin, access code, etc.) may, at most, be interpreted as information transmitted by the subscriber. The Applicant submits, however, that nothing in Paxton teaches or suggests that such transmission constitutes sending of "digital rights management information" by the user to the playback module. More importantly, the Applicant submits that even if we assume, arguendo, that this information allegedly constitutes "digital rights management information," which the Applicant does not concede, the Applicant submits that nothing in Paxton teaches corresponding "access right keys" that are (1) based on the user's transmitted information and (2) used in formatting television signals, where the television signals are

stored in an associated storage unit and are transmitted to the subscriber in response to request received from the subscriber.

Furthermore, even if we assume, arguendo, that Paxton does teach any such "access right keys," which the Applicant does not concede, the Applicant submits that Paxton does not teach or suggest that its alleged "playback module" (playout module 49) "generate[s] access right keys based on [the] digital rights management information, after the user sends the digital rights management information to the playback module that includes access rights for the program that was previously selected by the user and previously stored at the storage unit," as recited by the Applicant's claim 1. In this regard, the Applicant notes that Paxton does not teach or suggest that its playout module 49 generates any information that may reasonably be equated with the Applicant's "access right keys," where that information is generated based on data or messages sent by the users. Specifically, the Applicant submits that Paxton does teach any generation of information based on information or messages received from the users, as evidenced by the Examiner's failure to point to any such teaching. Rather, Paxton simply describes that when a "request message submitted from a [user] ... identifying the particular subscriber making the request" is received, "the request is routed to timeslip server 3 through playout module 49 which causes schedule table 41 to be consulted to identify the start point of the requested program." The Applicant submits that this clearly shows that Paxton does not require or imply any generation of any information that may be equated with the Applicant's "access right keys," or doing so subsequent to reception from users of information that may be equated with the Applicant's "digital rights management information."

b. The Examiner's conclusion that it would have been obvious to combine Mizutani with Christopoulos, Perlman, Solomon, and Paxton lacks the necessary articulated reasoning with some rational underpinning

The Applicant respectfully submits that the Examiner has failed to provide the necessary articulated reasoning with some rational underpinning with respect to the combination cited and relied upon in rejecting claim 1 under § 103(a). The Applicant initially notes the Examiner's burden when asserting that a particular combination is obvious:

[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 2143 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). *See also KSR*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval).

See MPEP § 2142.

For example, in asserting that it would have been obvious to combine Mizutani with Christopoulos, the Examiner argues:

Christopoulos teaches an analogous system which provides media from a server to users upon request, based on information in the form of "hints" which indicate user preferences, client capabilities and/or network capabilities ... [t]hese "hints" are obtained by the server to enable transcoding which provides "format fitting" media based on the user preferences and capabilities ... Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the recording instructions of Mizutani, by including information which indicates the network capabilities, as taught by Christopoulos, in order to better meet the needs of users based on each client device and network capability, thereby better meeting each users specific viewing needs.

See Final Office Action, at pp. 4-5

The Applicant respectfully disagrees with the Examiner's reliance on Christopoulos, and assertion that it would have been obvious to combine Mizutani with Christopoulos. Specifically, the Applicant notes that while Mizutani does relate to

recording of televisions signals (broadcasts) based on user instructions, nothing in Christopoulos describes or suggests that the invention taught by Christopoulos is directed at recording of televisions signals, and/or doing so in accordance with the user In this regard, the Applicant notes that Christopoulos is directed at instructions. "performing intelligent transcoding of multimedia data between two or more network elements in a client-server or client-to-client service provision environment." Christopoulos, at Abstract. Furthermore, the Applicant notes that Christopoulos does not describe any television broadcasts or signals, nor does Christopoulos describe any recording, whether of television signals or any other signals, or doing so in accordance with user instructions. In other words, the Applicant submits that because Christopoulos does not pertain to recording of television signals (but rather to transcoding of communicated media), and is not in the same field as Mizutani or the invention of the Applicant's claim 1, the Applicant submits that the "articulated reasoning with some rational underpinning" standard mandated in obviousness based rejections cannot be satisfied when asserting that Christopoulos may be combined with Mizutani (and remaining references) in order to reject the Applicant's claim 1.

The Applicant also submits that combining Mizutani with Christopoulos, Perlman, Solomon, and Paxton was not obvious to try. In this regard, the Applicant notes that the Examiner cites Christopoulos, Perlman, Solomon, and Paxton—that is four references—in combination with Mizutani in rejecting a single limitation of the Applicant's claim 1, that is the limitation of a "playback module configured to generate access right keys based on digital rights management information . . . . " The Applicant notes that the large number of references used by the Examiner with respect to the present limitation was necessitated by the Examiner's approach in handling the limitation. In this regard, the Applicant submits that the Examiner effectively dissects the limitation to a plurality of distinct elements relying on each of the references to show a teaching of each of the elements. In other words, the Applicant submits that the Examiner utilizes the type of approach that is expressly prohibited by the MPEP. See MPEP § 2106(II)(c) (stating that "USPTO personnel may not dissect a claimed invention

into discrete elements and then evaluate the elements in isolation. Instead, the claim as a whole must be considered.") In rejecting the present limitation, the Examiner cites Christopoulos for allegedly teaching "providing media from a server to users upon request, based on information in the form of 'hints' which indicate user preferences, client capabilities and/or network capabilities (i.e. quality parameters);" cites Perlman for allegedly teaching "encryption system which encrypts a video signal prior to storage ... an access control module configured to generate access rights which are transmitted via the network to authorized users ... and a playback module for transmitting the encrypted data to the user;" cites Solomon for allegedly teaching "a system where only authorized users are able to receive content in a format which enables the content to be displayed;" and cites Paxton for allegedly teaching "capture and selective playback of archived programs where the copy of the program selected to be stored is associated with information uniquely identifying the subscriber and wherein a playback system is configured to generate access rights for the subscriber after the user sends DRM information." See Final Office Action, at pp. 4-6.

Therefore, the Applicant submits that the Examiner's rejection is deficient because these references would not have been obvious to try when the limitation is taken as a whole since each of these references are deficient with respect to various aspects of the limitations. For example, as explained *supra*, Christopoulos is directed at "intelligent transcoding of multimedia data between two or more network elements in a client-server or client-to-client service provision environment" and as such its alleged teaching of transmission based on particular quality parameters would not have obvious to combine with the other arts that are directed at recording and playback of television signals or broadcasts. Furthermore, because Pearlman does not specify who can receive protected content, and does not teach or mandate that any generation of access right info is based on user interactions and/or information provided thereby, there is no reason for combining Pearlman with the elements allegedly taught by Solomon and/or Paxton. In other words, because none of the references specifically articulate or raise, with respect to the element being allegedly taught by each reference, the type of

problems that would direct a person having ordinary skill in the art to search for and find the remaining references for teaching the remaining elements, these references would not be chosen from "finite number of identified, predictable solutions, with a reasonable expectation of success," and as such their combination would not be obvious to try. See MPEP § 2141(III)(E).

Accordingly, the Applicant believes that the Applicant's claim 1 is not unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton, and that claim 1 should be allowed. Therefore, the Applicant respectfully requests that the rejection of claim 1 under 35 U.S.C. § 103(a) be withdrawn. The Applicant also reserves the right to argue additional reasons beyond those set forth herein to support the allowability of the independent claim 1 should such a need arise.

### II. Rejection of Claims 2, 11 and 14

Based on at least the foregoing, the Applicant believes the rejection of independent claim 1 under 35 U.S.C. § 103(a) for being unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton has been overcome. Accordingly, and because claims 2, 11 and 14 depend from independent claim 1, respectively, they are, consequently, also respectfully submitted to be allowable at least for the reasons stated above with regard to the rejection of claim 1 under 35 U.S.C. § 103(a). The Applicant also reserves the right to argue additional reasons beyond those set forth herein to support the allowability of the claims 2, 11 and 14 should such a need arise.

#### a. Rejection of Claim 2

The Applicant submits that at least for the reasons stated above with regard to the rejection of claim 1 under 35 U.S.C. § 103(a), the combination of Mizutani,

Christopoulos, Perlman, Solomon, and Paxton does not teach, disclose, and/or suggest the limitations of claim 1, wherein the "controlling central unit is configured to transmit, in accordance with the stored recording instructions, control signals to one of the connected television receivers for activation of the respective television receiver and/or for selection of a television channel on the respective television receiver based on the channel number" as recited by the Applicant's claim 2. Furthermore, in rejecting claim 2, the Examiner refers for support to Mizutani at col. 11, line 66 to col. 12, line 35 (further commenting "a controlling device inherently controls the activation or deactivation of the selected receivers to enable simultaneous control or alternatively using only a single receiver when multiple programs are not being aired simultaneously.") See Final Office Action, at p. 7.

Mizutani at col. 11, line 66 to col. 12, line 35, states:

With reference to FIG. 17, another embodiment of the present invention permits multiple tuners 121–123 to share a common video capture and encode box 103. All elements similar to those of FIGS. 1, 7, and 8 have similar reference characters and are described above. Multiple tuners 121 to 123 receive televised programs via link 33 and may each be tuned to a separate program, but it is to be understood that not all tuners are necessarily active at the same time. Multiple tuners are active simultaneously only when it is desirable to record multiple programs that are airing simultaneously. The output of tuners 121–123 are applied to a multiplexer 125 responsive to active tuner select bus 128. Multiplexer 125 sequentially alternates between active tuners, ignoring any inactive tuners, and transferring the signal from a currently selected active tuner to its output 126.

The output 126 of multiplexer 125 is coupled to video capture and encode box 103, which is illustratively shown to include multiple audio/video encoding format capabilities represented by boxes 131 135 ... Each of audio/video encoders 131–135 is responsive to a separate enable signal from encode format select bus 137. Only an enabled audio/video encoder 131 135 may latch in data on shared input bus 136 and may drive shared output bus 138. As was explained earlier, a user submitting recording instruction may assign a different encode format for each program to be recorded. Therefore, encode format select bus 137 activates the appropriate encoder 131–135 for each tuner 121–123 selected by multiplexer

125. The encoded output from video capture and encode box 103 is sent to second data store 105, which is applied to network access box 107 for communicating with the Internet 17.

The Applicant respectfully disagrees with the Examiner. Specifically, the Applicant notes that Mizutani does not disclose or suggest any controlling device, or any device that may construed as a "controlling device" for use in conjunction with the tuners 121–123, which the Examiner appears to equate with the Applicant's "television receivers." Furthermore the Applicant submits that even if we assume, *arguendo*, that Mizutani teaches any such controlling device, which the Applicant does not concede, the Applicant submits that nothing in Mizutani teaches or suggests that any such controlling devices transmit control signals to television receivers for activation thereof "in accordance with the stored recording instructions," as the Applicant's claim 2 recites.

Accordingly, the Applicant believes that the Applicant's claim 2 is not unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton, and that claim 2 should be allowed. Therefore, the Applicant respectfully requests that the rejection of claim 2 under 35 U.S.C. § 103(a) be withdrawn. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 2.

#### b. Rejection of Claim 11

The Applicant submits that at least for the reasons stated above with regard to the rejection of claim 1 under 35 U.S.C. § 103(a), the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton does not teach, disclose, and/or suggest the limitations of claim 1, wherein "the plurality of television receivers and the plurality of coding modules are configured to receive and record television signals from different channels in parallel at the same time for two different users from said users" as recited by the Applicant's claim 11. Furthermore, in rejecting claim 11, the Examiner refers for support to Mizutani at col. 4, line 66 to col. 5, line 8; col. 5, lines 26-55; and col. 11, line 66 to col. 12, line 35. See Final Office Action, at p. 7.

The Applicant respectfully disagrees with the Examiner. Specifically, the Applicant submits that Mizutani does not teaches or suggests a plurality of television receivers and the plurality of coding modules configured to "receive and record television signals from different channels in parallel at the same time for two different users from said users." In this regard, the Applicant notes that while Mizutani does describe different users (11 and 13) and a plurality of recording devices (23–27), nothing in Mizutani teaches or suggests that the system described thereby is configured to enable reception and recording of television signals from different channels for each of the users 11 and 13, and doing so at the time as the Applicant's claims 11 recites. Furthermore, the Applicant notes that Mizutani's "tuners 121–123" and the "encoders 131–135," which the Examiner appears to suggest read on the Applicant "the plurality of television receivers and the plurality of coding modules," can be configured for such parallel and simultaneous reception and recoding of television signals corresponding to different channels, and for different users.

Accordingly, the Applicant believes that the Applicant's claim 11 is not unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton, and that claim 11 should be allowed. Therefore, the Applicant respectfully requests that the rejection of claim 11 under 35 U.S.C. § 103(a) be withdrawn. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 11.

#### c. Rejection of Claim 14

The Applicant submits that at least for the reasons stated above with regard to the rejection of claim 1 under 35 U.S.C. § 103(a), the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton does not teach, disclose, and/or suggest the limitations of claim 1, wherein/and the limitation of "the quality parameters include information on display resolution of the respective display terminal, and transmission

speed of the telecommunication network to the respective display terminal" as recited by the Applicant's claim 14.

Accordingly, the Applicant believes that the Applicant's claim 14 is not unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton, and that claim 14 should be allowed. Therefore, the Applicant respectfully requests that the rejection of claim 14 under 35 U.S.C. § 103(a) be withdrawn. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 14.

### III. Rejection of Claims 3, 7-10 and 12-13

Based on at least the foregoing, the Applicant believes the rejection of independent claim 1 under 35 U.S.C. § 103(a) for allegedly being unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton has been overcome. In rejecting claims 3, 7-10 and 12-13, the Examiner cites in addition to the combination of Mizutani, Christopoulos, Perlman, Solomon, and Paxton, at least one of Jones, Fingerman, Ellis, Slotznick, and Mensch. *See* Final Office Action, at pp. 8-12. However, because the Examiner does not assert any additional grounds and/or make any additional arguments for rejecting claim 1 based on Jones, Fingerman, Ellis, Slotznick, and/or Mensch, and because claims 3, 7-10 and 12-13 depend from independent claim 1, they are, consequently, also respectfully submitted to be allowable at least for the reasons stated above with regard to the rejection of claim 1 under 35 U.S.C. § 103(a). The Applicant also reserves the right to argue additional reasons beyond those set forth herein to support the allowability of the claims 3, 7-10 and 12-13 should such a need arise.

### a. Rejection of Claim 3

The Applicant submits that at least for the reasons stated above with regard to the rejection of claims 1 and 2 under 35 U.S.C. § 103(a), the combination of Mizutani,

Christopoulos, Perlman, Solomon, Paxton, and Jones does not teach, disclose, and/or suggest the limitations of claims 1 or 2, wherein "the telecommunication network is a network based on Internet protocol, and the playback module is further configured to transmit the television signals, stored in the digital format, in streaming mode via the telecommunication network to the display terminal associated with the user" as recited by the Applicant's claim 3.

Accordingly, the Applicant believes that the Applicant's claim 3 is not unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Jones, and that claim 3 should be allowed. Therefore, the Applicant respectfully requests that the rejection of claim 3 under 35 U.S.C. § 103(a) be withdrawn. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 3.

## b. Rejection of Claim 7

The Applicant submits that at least for the reasons stated above with regard to the rejection of claim 1 under 35 U.S.C. § 103(a), the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Fingerman does not teach, disclose, and/or suggest the limitations of claim 1, wherein "the controlling central unit is further configured to transmit, after successful storing of the television signals, in accordance with the stored recording instructions, an electronic ready message via the telecommunication network to the mobile terminal of the user whose user identification is assigned to the respective recording instructions" as recited by the Applicant's claim 7. Furthermore, in rejecting claim 7, the Examiner refers for support to Fingerman, at col. 3, line 66 to col. 4, line 5. See Final Office Action, at p. 9.

Fingerman, at col. 3, line 66 to col. 4, line 5, states:

The encoded media program is stored by the delivery in digital format in a high speed-high capacity store. When the scheduled time for completion of the requested media program occurs, the reception and encoding stops and the delivery system prepares

and sends an electronic mail (e-mail) message to the client identifying one of a plurality of program delivery devices and the address of the file storing the digitized media program.

The Applicant respectfully disagrees with the Examiner's reliance on Fingerman in this regard. Specifically, the Applicant notes that nothing in the sections in Fingerman to which the Examiner refers does Fingerman teach or suggest transmission of "electronic ready message" by a "controlling central unit," as recited by the Applicant's claim 7. Furthermore, the Applicant notes that nothing in Fingerman teaches or suggests that any such transmission is done "after successful storing of the television signals," as recited by the Applicant's claim 7. In particular, the Applicant notes that Fingerman merely describes sending of "electronic mail (e-mail) message to the client identifying one of a plurality of program delivery devices" without particular tying this sending (transmittal) to the successful storage of "television signals," or particularly doing so after successful completion of such storage.

Accordingly, the Applicant believes that the Applicant's claim 7 is not unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Fingerman, and that claim 7 should be allowed. Therefore, the Applicant respectfully requests that the rejection of claim 7 under 35 U.S.C. § 103(a) be withdrawn. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 7.

#### c. Rejection of Claim 8

The Applicant submits that at least for the reasons stated above with regard to the rejection of claim 1 under 35 U.S.C. § 103(a), the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Fingerman does not teach, disclose, and/or suggest the limitations of claim 1, wherein "the controlling central unit is further configured to erase automatically television signals, after a defined period of time after their storage, and in that the controlling central unit is set up to transmit automatically, before the automatic erasing, an electronic warning signal via the telecommunication

network to the mobile terminal of the user whose user identification is assigned to the respective stored television signals" as recited by the Applicant's claim 8.

Accordingly, the Applicant believes that the Applicant's claim 8 is not unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Fingerman, and that claim 8 should be allowed. Therefore, the Applicant respectfully requests that the rejection of claim 8 under 35 U.S.C. § 103(a) be withdrawn. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 8.

### d. Rejection of Claim 9

The Applicant submits that at least for the reasons stated above with regard to the rejection of claim 1 under 35 U.S.C. § 103(a), the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Ellis does not teach, disclose, and/or suggest the limitations of claim 1, wherein "the controlling central unit is further configured to store only once, jointly assigned to the user identifications of the respective plurality of users, television signals, which have been received at a time and on a television channel which are identified through consistent recording instructions from a plurality of users" as recited by the Applicant's claim 9.

Accordingly, the Applicant believes that the Applicant's claim 9 is not unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Ellis, and that claim 9 should be allowed. Therefore, the Applicant respectfully requests that the rejection of claim 9 under 35 U.S.C. § 103(a) be withdrawn. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 9.

#### e. Rejection of Claim 10

The Applicant submits that at least for the reasons stated above with regard to the rejection of claim 1 under 35 U.S.C. § 103(a), the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Fingerman does not teach, disclose, and/or suggest the limitations of claim 1, wherein "the television receivers are configured to receive digital and/or analog television signals via cable television networks and/or via television antennas for terrestrial television broadcasting or satellite television transmission, and the controlling central unit and the playback module are each implemented on different computers connected to one another, the controlling central unit and/or the playback unit including memories for storing the television signals coded in the digital format" as recited by the Applicant's claim 10.

Accordingly, the Applicant believes that the Applicant's claim 10 is not unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Fingerman, and that claim 10 should be allowed. Therefore, the Applicant respectfully requests that the rejection of claim 10 under 35 U.S.C. § 103(a) be withdrawn. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 10.

### f. Rejection of Claim 12

The Applicant submits that at least for the reasons stated above with regard to the rejection of claim 7 under 35 U.S.C. § 103(a), the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Slotznick does not teach, disclose, and/or suggest the limitations of claim 7, wherein "the ready message is a short message sent to the mobile terminal of the user" as recited by the Applicant's claim 12.

Accordingly, the Applicant believes that the Applicant's claim 12 is not unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Slotznick, and that claim 12 should be allowed. Therefore, the Applicant respectfully requests that the rejection of claim 12 under 35 U.S.C. § 103(a) be

withdrawn. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 12.

### g. Rejection of Claim 13

The Applicant submits that at least for the reasons stated above with regard to the rejection of claim 1 under 35 U.S.C. § 103(a), the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Mensch does not teach, disclose, and/or suggest the limitations of claim 1, wherein "the instruction unit is further configured to extract the user identification of the mobile terminal by using at least one of an international mobile subscriber identity IMSI or a call number" as recited by the Applicant's claim 13.

Accordingly, the Applicant believes that the Applicant's claim 13 is not unpatentable over the combination of Mizutani, Christopoulos, Perlman, Solomon, Paxton, and Mensch, and that claim 13 should be allowed. Therefore, the Applicant respectfully requests that the rejection of claim 13 under 35 U.S.C. § 103(a) be withdrawn. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 13.

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#### CONCLUSION

For at least the foregoing reasons, the Applicant submits that claims 1-3 and 7-14 are in condition for allowance. Reversal of the Examiner's rejections and issuance of a patent on the application are therefore requested.

The Commissioner is hereby authorized to charge \$540 (to cover the Brief on Appeal Fee) and any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Date: March 21, 2012.

/Christopher C. Winslade/ Christopher C. Winslade Registration No. 36,308

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## CLAIMS APPENDIX (37 C.F.R. § 41.37(c)(1)(viii))

- 1. A system for recording and playback of television signals from a plurality of television channels, comprising:
  - a storage unit;
- a computer-based controlling central unit, connectible to a telecommunication network,
- a plurality of television receivers, each connected to the controlling central unit and configured to receive television signals on one of the television channels,
- a plurality of coding modules, connected to the television receivers, configured to code the received television signals into a digital format,

an instruction unit connected to the controlling central unit, configured to receive and store recording instructions from users via the telecommunication network, the recording instructions including a user identification of a mobile terminal, electronic programming guide (EPG) information identifying a program to be recorded of the television signals, and quality parameters, and configured to instruct the controlling central unit to select and store the television signals in the digital format on the storage unit corresponding to the program identified by the electronic programming guide information of the recording instructions and based on the quality parameters, and configured to assign the user identification to the selected television signals and to store the user identification together with the television signals on the storage unit, and

a playback module configured to generate access right keys based on digital rights management information, after the user sends the digital rights management information to the playback module that includes access rights for the program that was previously selected by the user and previously stored at the storage unit, and to transmit the television signals stored in the digital format on the storage unit in a format that depends upon the quality parameters and the access right keys via the telecommunication network for playback to a display terminal associated to the user, the

display terminal being identified by a network address that is linked to the user identification assigned to the respective stored television signals of the storage unit.

- 2. The system according to claim 1, wherein the controlling central unit is configured to transmit, in accordance with the stored recording instructions, control signals to one of the connected television receivers for activation of the respective television receiver and/or for selection of a television channel on the respective television receiver based on the channel number.
- 3. The system according to one of the claims 1 or 2, wherein the telecommunication network is a network based on Internet protocol, and the playback module is further configured to transmit the television signals, stored in the digital format, in streaming mode via the telecommunication network to the display terminal associated with the user.
- 7. The system according to claim 1, wherein the controlling central unit is further configured to transmit, after successful storing of the television signals, in accordance with the stored recording instructions, an electronic ready message via the telecommunication network to the mobile terminal of the user whose user identification is assigned to the respective recording instructions.
- 8. The system according to claim 1, wherein the controlling central unit is further configured to erase automatically television signals, after a defined period of time after their storage, and in that the controlling central unit is set up to transmit automatically, before the automatic erasing, an electronic warning signal via the telecommunication network to the mobile terminal of the user whose user identification is assigned to the respective stored television signals.
- 9. The system according to claim 1, wherein the controlling central unit is further configured to store only once, jointly assigned to the user identifications of the

respective plurality of users, television signals, which have been received at a time and on a television channel which are identified through consistent recording instructions from a plurality of users.

- 10. The system according to claim 1, wherein the television receivers are configured to receive digital and/or analog television signals via cable television networks and/or via television antennas for terrestrial television broadcasting or satellite television transmission, and the controlling central unit and the playback module are each implemented on different computers connected to one another, the controlling central unit and/or the playback unit including memories for storing the television signals coded in the digital format.
- 11. The system according to claim 1, wherein the plurality of television receivers and the plurality of coding modules are configured to receive and record television signals from different channels in parallel at the same time for two different users from said users.
- 12. The system according to claim 7, wherein the ready message is a short message sent to the mobile terminal of the user.
- 13. The system according to claim 1, wherein the instruction unit is further configured to extract the user identification of the mobile terminal by using at least one of an international mobile subscriber identity IMSI or a call number.
- 14. The system according to claim 1, wherein the quality parameters include information on display resolution of the respective display terminal, and transmission speed of the telecommunication network to the respective display terminal.

## EVIDENCE APPENDIX (37 C.F.R. § 41.37(c)(1)(ix))

- (1) U.S. Patent Application Publication No. 2001/0047516 A1 by M. J. Swain et al. entered into record by the Examiner in the office action of April 3, 2008.
- (2) U.S. Patent Application Publication No. 2002/0174430 A1 by M. D. Ellis et al. entered into record by the Examiner in the office action of April 3, 2008.
- (3) Canadian Patent No. 2,321,462 issued to Imagictv, Inc. entered into record by the Examiner in the office action of April 3, 2008.
- (4) U.S. Patent No. 7,143,430 B1 issued to Fingerman et al. entered into record by the Examiner in the office action of October 7, 2008.
- (5) U.S. Patent Application Publication No. 2002/0184637 A1 by Stephen G. Perlman entered into record by the Examiner in the office action of October 7, 2008.
- (6) U.S. Patent Application Publication No. 2003/0149988 A1 by Ellis et al. entered into record by the Examiner in the office action of October 7, 2008.
- (7) U.S. Patent No. 7,058,356 B2 issued to Benjamin Slotznick entered into record by the Examiner in the office action of October 7, 2008.
- (8) U.S. Patent Application Publication No. 2002/0133824 A1 by Linda S. Mensch entered into record by the Examiner in the office action of October 7, 2008.
- (9) U.S. Patent No. 6,963,898 B2 issued to Yoshimine et al. entered into record by the Examiner in the office action of March 20, 2009.
- (10) U.S. Patent Application Publication No. 2003/0070174 A1 by Merrill Solomon entered into record by the Examiner in the office action of March 20, 2009.
- (11) U.S. Patent Application Publication No. 2004/0015992 A1 by Hasegawa et al. entered into record by the Examiner in the office action of October 28, 2009.
- (12) U.S. Patent Application Publication No. 2001/0047517 A1 by Christopoulos et al.

- entered into record by the Examiner in the office action of June 23, 2010.
- (13) U.S. Patent No. 7,003,791 B2 issued to Kenji Mizutani entered into record by the Examiner in the office action of December 9, 2010.
- (14) U.S. Patent No. 7,900,231 B2 issued to Paxton et al. entered into record by the Examiner in the office action of October 28, 2011.

# RELATED PROCEEDINGS APPENDIX (37 C.F.R. § 41.37(c)(1)(x))

The Appellant is unaware of any related appeals or interferences.